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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/652,494

09/02/2003

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116974

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06/13/2007

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EXAMINER

DHINGRA, PAWANDEEP

ART UNIT

PAPER NUMBER

2625

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/652,494

Applicant(s)

NITTA ET AL.

Examiner

Pawandeep S. Dhingra

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09/02/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :4/16/2007, 2/1/2006, 9/9/2005, 9/2/2003.

## **DETAILED ACTION**

### ***Drawing Objections***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the complete features of claim 12, 13 (e.g. markers), 16 (e.g. color matching section), 18 (e.g. cutting section), 19, and 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification Objections***

1. Specification is objected to because of the following informalities:

a. On page 18, line 22, "unit witch" shall be changed to "units which".

Applicant must review entire specification section for such errors and appropriate corrections are required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites the limitation "at least one of the sections described above is considered as unit separate from the other sections". There is insufficient antecedent basis for this limitation in the claim.

***Examiner Notes***

Examiner cites particular paragraphs, columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially

teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 7-15, 17, and 19-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Wellner, US 5,511,148.

Re claim 1, Wellner discloses a preview device (see figure 1), comprising: display section (see surface 2, figure 1) for simulating a state where a predetermined image (i.e. image 21) is actually drawn on an image-forming surface (i.e. surface 2) on which a tangible image is formed (see figure 1, and column 2, lines 27-44, column 5, line 65-column 6, line 17, and column 9, lines 20-25); and display information acquisition section (see figure 2) for acquiring display information about actual display state of the image displayed by the display section on the image-forming surface (see figures 6a-6f, and column 13, lines 1-column 15, line 6).

Re claim 2, Wellner further discloses the display information contains at least the size of the displayed image on the image-forming surface, position (i.e. location) of the displayed image on the image-forming surface, or color of the displayed image on the image-forming surface (see figures 6a-6f, and column 13, lines 1-column 15, line 6).

Re claim 3, Wellner further discloses correction section for changing the display state of the image displayed by the display section on the image-forming surface (see figures 6a-6f, and column 13, lines 1-column 15, line 6).

Re claim 4, Wellner further discloses the display section simulates a state where an image is actually drawn on the image-forming surface by projecting light on the image-forming surface (see figure 1, and column 5, line 65-column 6, line 17).

Re claim 5, Wellner further discloses the display information acquisition section acquires the display information based on at least the position of the display section to the image-forming surface, distance of the display section from the image-forming surface, projection angle of light projected onto the image-forming surface, or color of the image-forming surface (see column 11, lines 10-26, column 16, line 55-column 17, line 3).

Re claim 7, Wellner further discloses the display section includes a display which transmits light from one side to the other side of a display surface where images are displayed (see column 16, line 55-column 17, line 3) and the display section simulates a state where a predetermined image is actually drawn on the image-forming surface with the display superimposed over the image-forming surface (see column 16, line 55-

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column 17, line 3, and "desk-camera-projector arrangement" elements (2,6,8) in figure 1).

Re claim 8, Wellner further discloses generating drawing data for drawing (i.e. displaying) the predetermined image (i.e. image 21, figure 1) on the image-forming surface (i.e. surface 2, figure 1) nearly the same as the simulated predetermined image based on the display information (i.e. UI 252, figure 2) (see column 5, line 65-column 6, line 17, and column 16, line 55-column 17, line 3, note the system of Wellner projects the image, as seen on the display of UI 252, nearly as same or better according to the user's preferences onto the imaging surface).

Re claim 9, Wellner further discloses drawing section (i.e. printer, see figure 1-2) for drawing (i.e. printing) the predetermined image tangibly based on the drawing data (i.e. image data) (see figure 1-2, and column 16, line 55-column 17, line 3).

Re claim 10, Wellner further discloses the drawing section draws the predetermined image directly on the image-forming surface based on the drawing data (see figure 1, and column 5, line 65-column 6, line 17, note that drawing section is part of the system disclosed in figure 1, see column 6, lines 35-48).

Re claim 11, Wellner further discloses the drawing section (i.e. printer) draws the predetermined image on a drawing medium added to the image-forming surface, based on the drawing data (see figures 1-2, column 5, line 65-column 6, line 17, and column 6, lines 35-48).



Re claim 12, Wellner further discloses the drawing section (i.e. copier) is capable of drawing (i.e. copying) the predetermined image on a plurality of drawing media (i.e. paper, see documents 4, and 20 in figure 6a-6f) by dividing it into parts (see elements 22, 26, 28 in figures 6a-6f) (see column 13, lines 1-column 15, line 6).

Re claim 13, Wellner further discloses the image-forming surface contains markers which serve as a guide for dividing the image-forming surface into multiple areas (see column 3, lines 4-15), the display information acquisition section acquires the positions of the markers on a displayed image, and the drawing section draws the predetermined image on a plurality of drawing media by dividing it into parts based on the positions of the markers (see column 3, lines 4-15, column 18, lines 1-11, note that Wellner does not explicitly disclose markers for dividing the imaging surface into multiple areas, and printing data on plurality of media. However, Official Notice is taken to note that ability to divide the imaging surface with markers is well known in the art. It would have been obvious to include markers to divide the three documents shown in figure 1 of Wellner to further separate them into three parts, which would then be printed on separate plurality of media for the benefit of enabling the user to clearly see distinct images on the imaging surface)

Re claim 14, Wellner further discloses the drawing section is a predetermined printer (see figures 1-2, column 5, line 65-column 6, line 17, and column 6, lines 35-48).

Re claim 15, Wellner further discloses the drawing section is an ink jet printer (see column 6, lines 60-65).

Re claim 17, Wellner further discloses acquiring the display information about a plurality of images, judging the shape of each image based on the display information, and laying out the plurality of images on a drawing surface at a higher density (see figures 6a-6f, and column 13, lines 1-column 15, line 6, column 16, line 55-column 17, line 3, and figures 10a-10d).

Re claim 19, Wellner further discloses image reading section (i.e. scanner or camera) for reading images and capable of utilizing data about the images read by the image reading section (see column 2, lines 50-53, and column 9, line 65-column 11, line 3).

Re claim 20, Wellner further discloses at least one of the sections described above is configured as a unit separate from the other sections (i.e. stylus) and is capable of communicating with the other sections (see column 3, line 60 – column 4, line 10, note that stylus can be used instead of finger for performing changes to the images as described in figures 6a-6f).

Re claim 21, Wellner further discloses the display section includes a plurality of projectors (see column 20, lines 5-18) capable of projecting screen images (i.e. image displayed on UI 252, figure 2) onto the image-forming surface (see figures 1-2, column 2, lines 27-44, column 5, line 65 - column 9, line 25) and displays the predetermined image (i.e. image 21) using the screen images projected by the individual projectors on the image-forming surface (see column 20, lines 5-18, and column 9, lines 20-58).

Re claim 22, Wellner further discloses an electronic device equipped with the preview device set forth in claim 1 (see figure 1-2).

Re claim 23, Wellner further discloses an image forming apparatus equipped with the preview device set forth in claim 1 (see figure 1-2).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 6 is rejected under 35 U.S.C. 103 as being unpatentable over Wellner, US 5,511,148 in view of Nakamura, US 6,416,186.

Re claim 6, Wellner fails to further disclose the distance of the display section from the image-forming surface is acquired based on the magnification and focal distance of an optical system used by the display section to project light.

However, Nakamura discloses the distance of the display section from the image-forming surface is acquired based on the magnification and focal distance of an optical system used by the display section to project light (see column 2, lines 26-33, and column 7, lines 22-57).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the interactive copying system as disclosed by Wellner to include the projection display techniques taught by Nakamura for the benefit of having a "projection display unit that can project an image whose distortion is corrected" as taught by Nakamura at column 1, lines 5-6.

8. Claim 16 is rejected under 35 U.S.C. 103 as being unpatentable over Wellner, US 5,511,148 in view of Fukao, US 2002/0126302.

Re claim 16, Wellner fails to further disclose color matching section for matching colors between the image displayed by the display section and the image drawn by the drawing section.

However, Fukao discloses color matching section for matching colors between the image displayed by the display section and the image drawn by the drawing section (i.e. printer) (see paragraphs 0002 and 0029, note that image can also be projected via using the output from video signal generator).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the interactive copying system as disclosed by Wellner to include the color matching techniques taught by Fukao for the benefit of providing "an image processing apparatus and method by which the user can easily predict adjustment results and readily designate desired color adjustment, and to provide an image processing system" as taught by Fukao at paragraph 0007.

9. Claim 18 is rejected under 35 U.S.C. 103 as being unpatentable over Wellner, US 5,511,148 in view of MacDonald, US 6,594,026.

Re claim 18, Wellner fails to further disclose cutting section for automatically cutting off, or making it easy to cut off, images drawn by the drawing section.

However, MacDonald discloses cutting section (i.e. perforator unit) for automatically cutting off, or making it easy to cut off (i.e. perforating a printed document), images drawn by the drawing section (i.e. printer) (see abstract, column 5, lines 55-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the interactive copying system as disclosed by Wellner to include the software controlled perforator unit taught by MacDonald for the benefit of providing "perforator control options and commands to pre-existing software programs in a "user-friendly" manner easily understood by users familiar with the pre-existing software programs, such that entries on user menus, mouse-selectable icons, function keys, and the like, as conventionally provided to control various print functions, are provided corresponding to the perforator control functions of interest" as taught by MacDonald at column 2, line 67-column 3, line 6.

***Note***

The examiner would like to point out that the claims 8, 12, 17, and 21 recite intended use for the preview device, as evidenced by the terms "capable of", which may or may not import patentable weight to the claims. See MPEP 2106 for further details.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

JP A 11-098440, see whole document.

JP A 07-219068, see whole document.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pawandeep S. Dhingra whose telephone number is 571-270-1231. The examiner can normally be reached on M-F, 9:30-7:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Lamb can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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Pd

  
KING Y. POON  
PRIMARY EXAMINER